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RESEARCH PAPER

Evolution and Development of a Code for Private Native Forestry in New South Wales, Australia

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Abstract Until recently the focus of forestry regulations in New South Wales (NSW) was on public rather than private lands. This paper describes the process of developing legislation to control where and how private native forestry takes place. To date, the lead agency in attempting to formulate a clear policy has been the Department of Natural Resources. First, through a series of committee meetings of representatives of key stakeholder groups, a draft private native forestry code was devised and was released for public comment. After a period of intense negative reaction from both those in favour of continuing timber production in native forests and those in favour of requiring that private lands be managed as nature reserves, the draft code was withdrawn and a government-appointed committee then began again the process of drawing up a code acceptable to most stakeholders.

Keywords Forestry legislation · Draft code · Vegetation management plans · Habitat trees · Regrowth · Incentives

Introduction

Since 1996 several agencies in New South Wales (NSW) have been attempting to devise a legally-binding code of practice for private native forestry. The *Native Vegetation Conservation Act 1997* contained an exemption for 'sustainable forestry' with few specific restrictions. Under this act, regional vegetation committees were formed, with a mandate to produce regional vegetation management plans designating areas of high conservation value, where there should be a focus on protective management. The *Native Vegetation Act 2003*, which did not come into effect until 2005, required that a Code for Private Native Forestry be developed.

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From 2004 until mid-2006, several committees, two consisting of various stakeholders from the general public, and an internal committee of Department of Natural Resources and Department of Environment and Conservation employees, devised various versions of a code. A draft code was released for public comment in July 2006, with 30 days available to send in submissions. After considerable protest from both pro-forestry and environmentalist groups, the code was withdrawn and further consultations, using the Natural Resources Advisory Council, were proposed. The debate is heavily polarized, with those favoring continued economic harvesting opposed by those who believe government regulations must focus on enhancing biodiversity and environmental values on private land.

This paper describes the process of the development of a code for private native forestry in the context of a society that has already supported a major shift of land from public forestry to reserve status. The major events in revising the *Native Vegetation Conservation Act 1997*, including the passing of a new *Native Vegetation Act 2003*, and subsequent attempts to develop a PNF code, are critically reviewed. Both formal and informal sources of information have been consulted.

The Importance of Private Native Forestry in NSW

Private native forests in NSW make a substantial contribution to local and regional timber supply. Using a liberal definition of forest as a vegetation type that has woody plants at least 2 m high and overstorey crown cover of greater than 20%, approximately 21% of Australia is in forest, with an area 164 M ha (Bureau of Rural Science 2003). Of this area, approximately 127 M ha, or 78% of all forest is eucalypt forests of various types (Table 1). Of this, only about 93,000 ha is closed eucalypt forest and the remainder is classified as either open forest or woodland. Fire plays a important role in Australian forests, particularly in eucalypt forests, where it maintains 'sub-climax' status over large areas (Bradstock et al. 2002). About 10% of the total forest area is in acacia stands, 4% in *Melaleuca* and 3% in

Table 1 Forest types in Australia[a]

Forest type	Area (M ha)
Eucalypt forest and woodland	127.03
Acacia woodlands	16.49
Melaleuca	7.06
Callitris (cypress pine)	2.33
Casuarina	2.04
Mangrove	0.74
Rainforest	4.22
Softwood plantation (mainly *Pinus* species)	0.72
Hardwood plantation (mainly eucalypt species)	1.00

[a] Total land area of the continent is 758 M ha, of which approximately 164 M ha or 21% is forest (BRS 2005)

rainforest. There is a total of 1.6 M ha of plantations, nearly 1 M ha in pines (*Pinus radiata*, *P. elliottii* and *P. elliotii x P. caribaea* hybrids) and the remaining 600,000 ha in hardwoods, mainly eucalypts. Hardwood plantations are expanding at around 80–100,000 ha per year.

Australia does not have a system of federally-owned public forests, analogous to the American National Forests and systems in many European countries. Nevertheless, the federal or commonwealth government does play an important role in shaping policy and distributing funds to various environmental projects. Public forests are the responsibility of state agencies. In the case of New South Wales, this agency is Forest New South, formerly State Forests NSW, and earlier the Forestry Commission. Their forests had been managed throughout much of the 20th century for multiple purposes, including timber production (Carron 1985). In the late 1990s the federal government introduced Regional Forest Agreements (RFA) (Kirkpatrick 1998; Lane 1999) in an attempt to resolve conflict over the management and harvesting of public forests. Under the RFAs in NSW large areas were taken from operational forestry status in State Forests and put into reserves, mainly in National Parks (which contrary to their name, are administered by the NSW Department of Environment and Conservation) or into reserves in state forest. For example, this included about 325,000 ha in southern NSW and 400,000 ha in north–east NSW that would no longer be used for any timber production (Northern NSW Forestry Services, 2005; Forests NSW 2004) (Table 2).

There are approximately 27 M ha of native forest in NSW, of which one-third is in private ownership. Since the late 1990s both the conversion of state forests to national parks and the imposition of highly restrictive rules on harvesting on public forests have increased the relative importance of forestry on private land. Currently, about 43% of the supply of sawlogs in NSW comes from private native forests. In the north coast region of the state the estimated annual volume of private native forest timber harvested is 270,000 m^3 (Thompson et al. 2006). About 75 sawmills in this region depend entirely on the private log resource, which generates 2,300 jobs.

The focus on private forests is relatively recent. For example, the book 'Forest Management in Australia' (McKinnell et al. 1991) is devoted almost entirely to

Table 2 Forest ownership in New South Wales

Tenure	Area (M ha)
Leasehold land (under private management)	9.47
Public multiple-use forest	2.50
Nature conservation reserves	4.47
Unresolved tenure	0.64
Other crown land	1.06
Private land	8.52
Total native forest	26.66
Plantations all tenures	0.34
Total forest	27.00

public forests; it does not have a single chapter on private native forests, even though there are four chapters on management of public forests in NSW.

Forest Legislation in NSW

Even before consideration of a specific code for private forestry became an issue there was an increasing number of state acts relevant to forestry and other land uses on private land. A partial list of laws and regulations is provided in Table 3. Some groups argue that the complex legislation and regulations are sufficient to assure reasonable levels of biodiversity and environmental health in private native forests, noting that no other agricultural pursuits are so heavily regulated (NAFI 2006).

In 1995, the New South Wales Government introduced comprehensive controls on the clearing of native vegetation through a State Environment Planning Policy (SEPP 46). The objective of the policy was to halt clearing while a more permanent legislative approach was developed with stakeholders. Under SEPP 46, development consent was required to clear vegetation, but with a number of exemptions, including an allowance of 2 ha per year of clearing per property and allowances for providing building and fencing materials for on-farm use. Applications were assessed according to environmental considerations including biodiversity values, soil erosion, salinisation and catchment effects, presence of Aboriginal sites, and social and economic considerations.

The *Native Vegetation Conservation Act 1997* (NVCA) was concerned with preservation and restoration of native vegetation communities. An exemption for private native forestry was available under this Act if it satisfied the definition of 'sustainable forestry'. The only conditions under which special permission from the Department of Land and Water had to be obtained was for 'state protected land', that which has a slope greater than 18°, or where there would be an impact on fauna

Table 3 Partial list of laws pertaining to native forest management in New South Wales

The Forestry Act of 1916
Soil Conservation Act of 1938
The National Parks and Wildlife Act, 1974
Environmental Planning and Assessment Act of 1979
Wilderness Act of 1987
Fisheries Management Act, 1994
Threatened Species Conservation Act of 1995
The Rural Fires Act of 1997
The Protection of the Environment Operations Act, 1997
The Plantations and Reafforestation Act of 1999
State Environmental Planning Policy No. 14—Coastal Wetlands
State Environmental Planning Policy No. 26—Littoral Rainforests
State Environmental Planning Policy No. 44—Koala Habitat Protection

or flora species listed in the Act. Otherwise, unless local councils had conflicting regulations, forest harvesting was largely unregulated. Section 52 of this the NVCA also set up a group of Regional Vegetation Committees, with functions of:

(a) Preparing, with the approval of the Minister, draft regional vegetation management plans for the region in respect of which the Committee is established,
(b) Monitoring and reviewing the regional vegetation management plans after they were made, and
(c) Such other functions as are conferred or imposed on it by or under this Act.

Though there are restrictions on private native forestry under the NVCA of 1997, many considered them very weak or ineffectual, and felt that for most purposes logging on private land was not regulated (Cohen 2006a, b, c). Amongst some factions in society it was felt that the sustainable forestry exemption was providing an excuse for land-clearing, that sustainable yields were not being attained, and that there were serious losses of biodiversity from private forests (Prest 2003).

The Native Vegetation Act of 2003

The *Native Vegetation Act 2003* (NVA) though passed in NSW Parliament in December 2003 did not become law until late 2005. Sections of this Act particularly pertinent to private native forestry are found in its baseline definitions:

'For the purposes of this Act, *clearing* native vegetation means any one or more of the following:

(a) Cutting down, felling, thinning, logging or removing native vegetation,
(b) Killing, destroying, poisoning, ringbarking, uprooting or burning native vegetation.

For the purposes of this Act, *broadscale clearing* of native vegetation means the clearing of any remnant native vegetation or protected regrowth.

(1) For the purposes of this Act, *remnant native vegetation* means any native vegetation other than regrowth.
(2) For the purposes of this Act, *regrowth* means any native vegetation that has regrown since the earlier of the following dates:
    (a) 1st January 1983 in the case of land in the Western Division and 1st January 1990 in the case of other land,
    (b) The date specified in a property vegetation plan for the purposes of this definition (in exceptional circumstances being a date based on existing rotational farming practices)' (Department of Natural Resources 2006a).

As indicated in this quote, several commonly used terms were redefined and became new, legal definitions. In the 19th and early 20th centuries, much of Australia's forest vegetation was indeed cleared, and the land converted to agricultural uses or grazing. Many of those areas that were in pastures have reverted to native forest, particularly in the second half of the 20th century. This forest was commonly

referred to as *regrowth*. But under the NVA of 2003 any area naturally revegetated before 1990 was redefined as *remnant vegetation*. True broadscale clearing has been a serious concern in parts of NSW and Queensland in the 1990s and early 21st century, mainly in dry woodland areas, where low woody vegetation was cleared with heavy machinery (ABARE and BRS 2003). But under the new law, private native forestry, even if it means harvesting one tree in a 1,000 ha patch of forest 13 years old or older, would be legally defined as broadscale clearing. Thus, under law, native forest management for timber production is not distinguished from actual clearing of native vegetation for conversion to other uses.

The Role of Catchment Management Authorities in NSW Forest Management

Closely related to the NVA of 2003 are the 13 Catchment Management Authorities (CMAs) established across the State by the New South Wales Government 'to ensure that regional communities have a significant say in how natural resources are managed in their catchments'. These committees were originally formed on the recommendation of The Wentworth Group (World Wildlife Fund 2003). The CMAs report directly to the NSW Minister for Natural Resources. These statutory bodies, established under the *Catchment Management Authorities Act 2003* (CMA Act), coordinate natural resource management (NRM) in each catchment. Their stated role is to be 'responsible for involving regional communities in management of the NRM issues facing their region, and are the primary means for the delivery of funding from the NSW and Commonwealth Governments to help land managers improve and restore the natural resources of the State' (DNR 2006a).Each CMA board consists of a chairperson and up to six board members, who have expertise in primary production or in land management for conservation purposes. The CMAs are set up to integrate their activities with local governments, State Government agencies, industry and individuals. The CMAs are administering '$436 million over 4 years that will go directly to farmers and other local groups to repair damaged rivers and restore over-cleared landscapes' (Northern Rivers CMA 2005). Anyone wishing to manage native forest on private land requires a property vegetation plan (PVP) in accordance with the NVA of 2003.

The Introduction of a Code for Private Native Forestry in NSW

The *Native Vegetation Act 2003* required the development of a code for private native forestry. Throughout 2004 the PNF code development committee had monthly meetings in Sydney. The committee was headed by officials of the Department of Infrastructure, Planning and Natural Resources (DIPNR, formerly Department of Land and Water Conservation or DLWC and presently DNR). Members included forestry and planning specialists from the agency itself, representatives of the Department of Environment and Conservation, which includes the NSW National Parks and Wildlife Service, a representative (the

author) of the Ecological Society of Australia (a scientific organisation), representatives of Australian Forest Growers, a consultant forester, and members of various environmental groups, including the Nature Conservation Council of NSW. The apparent objective was to include a fair cross-section of the stakeholders in society with interest in private native forests.

During each day-long meeting members discussed the most current version of a draft code that had been collated by the responsible Department. Some components of the proposed code were the subject of long debates. Among these were prescriptions for minimum basal areas. These were described for 11 forest types and included required minimum basal areas for stands with heights less than and greater than 25 m. In many cases, for example spotted gum stands greater than 25 m in height, the prescribed basal area—16 m^2 per ha in this instance—was as great as or greater than that of most existing stands. Although no major areas of the code were accepted by all parties, the main disputes were over minimum basal areas, numbers and sizes of habitat trees to be retained, and width of riparian buffer strips. Committee members with a background in forestry argued for experimentally-supported levels of basal area needed to assure adequate regeneration of known light-demanding eucalypt species (for example 10 m^2 for spotted gum, as reported by Florence (1996) and Baur (2001)). Representatives for environmental groups argued for much higher minimum basal areas with no quantitative evidence that higher basal areas always mean a healthier forest.

Hollow trees are acknowledged to be important for nesting by both birds and arboreal marsupials but how many trees are required to maintain maximum numbers of all fauna species –if that is a reasonable goal – has not been established yet. Wormington et al. (2002) studied hollow tree and arboreal marsupial presence in public dry sclerophyll forests which had been partially harvested for more than 100 years in Queensland. They concluded that prescriptions of three to six trees per hectare were probably adequate to maintain populations. But some members of the committee argued that the largest five (or even 10) trees per ha should be protected, without substantiation that this would lead to a better outcome for fauna species.

This committee last met in November 2005, when responsibility for a code was turned over to another group, the Natural Resources Advisory Committee (NRAC). This was a group of stakeholders generally representing the various viewpoints of the original committee, with some individuals belonging to both groups. In 2005 DIPRNR became DNR and a decision was made that—given the difficulties both groups had had in coming to an agreement—a draft Code would be prepared within DNR for public release.

Release of Draft Code for Private Native Forestry

On 25 July 2006, the Department of Natural Resources released a Draft Code for Private Native Forestry, making copies available at its offices and online (DNR 2006a, b). The Code itself is a 29-page document, and was accompanied by

1. A set of silvicultural guidelines for PNF (85 pages),
2. A tree retention case study (33 pages),
3. A report of a GIS analysis of various options and their effects on gross area of timber availability (19 pages), and
4. 'Listed species ecological prescriptions' (50 pages).

Only one of these, the tree retention case study, has an author listed (M. J. O'Neill, a consulting forester).

In August 2006 a series of public meetings were held around NSW, with representatives of DNR explaining the code to the general public. The role of these public servants was not to defend the code but to clarify its provisions, explaining it to persons or organisations who wished to make submissions to the state government. The meetings were generally well attended and often quite heated.

Response by the Public

Once posted, the code was available for comment from the public, until 22 August 2006, a period of slightly more than 1 month. Essentially, the debate that had been taking place within a selected committee was now out in the general forum of the 6 M citizens of the state. The public comment period came after years of discussion of the matter across the state. For example, the website of the NSW parliament lists 118 statements in parliament relating to private native forestry made during 2003–06 (Parliament of NSW 2006), many of them heated commentaries either in favour of or against regulation of private native forestry.

A typical response to the code from environmentalist groups is that of Cohen (2006b), member of NSW parliament from the Greens party. His website states that the 'whilst the Draft Code does introduce some long-overdue conditions on private logging, it contains a large number of glaring failures which means that it requires major and drastic changes before it can deliver a good environmental outcome'. In a widely-circulated email, he suggested that supporters concentrate their submissions to DNR on the following points:

- 'Require threatened species surveys or habitat assessments of all areas prior to logging'
- 'Strictly protect mapped old growth and rainforest, and do not allow a discretionary field test.'
- 'Prohibit 'patch-clearfelling'.
- 'Strictly protect all rare and severely depleted ecosystems, and habitat corridors.'
- 'Include strict limits on the size of trees that can be logged, especially for ironbark, cypress and river redgum and improve habitat tree retention rules.'
- 'Markedly improve the conditions of Forest Management Plans, ensure that all logging requires an FMP and require that an FMP must be submitted as part of a PVP and cannot be amended thereafter.'
- 'Make all logging immediately subject to the improved Code of Practice, and do not allow any further time for a transition when it has already been more than 3 years in preparation.'

- 'There must be a public register of PVPs and Development Approvals, and these must be available (along with FMPs) for inspection by the public at DNR offices.'
- 'Areas that are excluded from logging must be protected in perpetuity from other damaging uses, and no other clearing of any form should be allowed in them.' (Cohen 2006b).

Concerning the second bullet point, the word 'protect' is synonymous with protect from logging or tree harvesting, and does not consider protecting from catastrophic wildfires, from feral animals or weeds, or from fragmentation by human settlement.

With regard to the third bullet point, there has been—and continues to be—controversy over what is considered an acceptable gap size. Some environmental groups consider that making a gap larger than that formed when a single tree is cut down is clearing by stealth. But the minimum gap sizes needed for successful regeneration of most eucalypts (species which generally are shade-intolerant) have been well established in the silvicultural literature, reported for example by Florence (1996) and Baur (2001).

In contrast to these points are those made in a typical submission from the pro-forestry side of the debate (submission by Hoggett 2006):

> 'Our central criticism of the Code is that it will prove unworkable over the bulk of the private native forest domain. It will therefore be an effective prohibition of most private native forestry. This is of serious concern, as most native forest is on private land and most publicly owned native forest is locked up in Parks with State Forests reduced to a shadow of its former operation. The Code is also a massive overkill when we consider that broad scale clearing has virtually ceased in NSW…'

He suggested three major problems with the proposed code:

> 'First, it is incredibly voluminous and thus hard to comprehend. The code is an extremely detailed set of provisions for forestry operations. The numerous sections, subsections and tables will prove well beyond the comprehension of most landholders let alone their capability to satisfy them. It is a common failing of legislators and officials to assume that the average farmer will have the hours and expertise to actually give effect to complex legislation in the spare time from his daily work….
> Second, 'The landholder will need to have regard to all the potential threatened species, populations and communities (at last count there were over 800 endangered or vulnerable flora and fauna). He will need to avoid riparian zones (including unmapped drainage zones), aboriginal and other heritage sites, rocky outcrops, erosion areas and measure slopes. He will need to prepare and follow a very detailed harvesting plan and possibly a forest management plan. He will need to count and measure tree species, preserve certain species, retain a range of hollow bearing trees, feed trees, recruitment trees, roost trees, nest trees and food resource trees. He will have to observe close to 100 operational conditions. He will have to accept any directions by the Department. He will have to report on all this regularly. He will be subject

> to a number of regeneration obligations that the Government does not even impose on its own forest operations…
> 'Third, the Code will be environmentally perverse. The underlying purpose of the Code is to protect and improve the NSW forest environment. By making officially sanctioned private native forestry inaccessible to most landowners, two outcomes are most likely.
> In the knowledge that the law will be almost impossible to administer, the more 'enterprising' will conduct forestry operations while observing the minimum or no obligations on the ground. They will either 'tick boxes' or just ignore the whole legislative mess. They will bank on the knowledge that if they do not have the time to identify and tape measure every tree on their property, the official tree auditors will be unable to do so over the millions of hectares of private native forest.
> Many will just give the whole idea up and set aside the land in the hope that the Government will see sense in the end. They will adopt a policy of neglect. To avoid further expropriation or government imposed obligations, they will not report environmental features or endangered species. They will minimise pest and weed control. They will endure the inevitable periodic fires, which will be the more serious and cause greater damage to the forest than would be the case if sustainable forestry were permitted (vide destruction of the National Park estate in 2003). This will maximise forest green house emissions. In short, landholders will not become unpaid rangers in the 'parks' created by government on their land'.

These two submissions are typical of the points of view of two general groups, namely those supporting tree harvesting and economic uses of forests and those who believe that all forests in the state, whether public or private, should be managed for biodiversity and environmental values. To say that there are only two positions on the matter of private native forestry would be incorrect, because there are a variety of viewpoints within both 'camps'. For example, the forestry profession has encouraged the application of silvicultural management according to techniques described by Baur (2001), Florence (1996) and others (e.g. McKinnell et al. 1991) for many years. These techniques, which are an investment in the future forest, are rarely applied. This contrasts with the general position of the timber industry, which is primarily concerned with maintaining access to sources of inexpensive logs. On the environmentalist side, some groups advocate the complete elimination of native forest harvesting whereas others see a place for regulated native forestry, alongside the development of plantations on former grazing land. Nevertheless, there is a large gulf in philosophy between these two general viewpoints, which perhaps (if the experience of several years in trying to develop a code by committee is an indication) is an insurmountable one.

By late August 2007, the DNR had received more than 1,500 submissions, most hostile to the draft code from one point of view or the other, and the decision was taken to withdraw the draft code and send it to the NRAC committee. Ian Macdonald, the Minister for Natural Resources, Minister for Primary Industries and

Minister for Mineral Resources, explained the outcome to the NSW parliament (Macdonald 2006):

> 'There has been prolonged debate over the draft code, but this has not resulted in a code that is acceptable to all parties to the debate. It has been a highly polarised debate. The Government has recently invited public comment through a public exhibition process and has held community information sessions across the State. We have sought public submissions and have received in excess of 1,500 such submissions. What has become apparent through this consultation process is that industry and conservationists will not support the draft code in its present form. For the code to be workable it must have the support of the key stakeholders. For this reason I am handing the matter back to the Natural Resources and Advisory Council [NRAC], the membership of which comprises representatives from all key stakeholder groups'.

He further explained what the next part of the process would be:

> 'The NRAC will have until the end of the year to bring back a new draft code. The departments of Natural Resources, Environment and Conservation, and Primary Industries, as well as the Premier's Department, will assist the NRAC in its deliberations. If the stakeholders themselves cannot reach agreement, the Government will refer the issue to the Natural Resources Commission and act on its independent advice. The stakeholders are on notice that if they revert to entrenched positions the Government will step in. They now have a chance to demonstrate that they can work together to preserve the environment and the interests of landowners, industry and workers in regional New South Wales. The Government will bring in a code, but, as I reminded honourable members earlier this year, we will not bring in a code that does not represent the best possible policy outcome for all stakeholders: landholders, industry, conservationists and the broader community.'

Accomplishments and Points of Contention in the Development of a Draft Forestry Code of Practice

It is difficult to point to any specific accomplishments, at least in terms of how private native forests are actually managed, in the process of code development to date. The primary accomplishment of these meetings was basically to reveal that the various groups could not agree on a number of the most basic components of a private native forestry code. Partly, the impasse resulted from a lack of understanding of basic ecology and forest management. Though it is difficult to obtain information on actual amounts of money spent, it is clear that large sums of public money have been spent on attempts to develop a code and regulate management of vegetation on private land. An anonymous officer of DLWC, now DNR, estimated that during the period of writing regional catchment management plans, that total expenditure on salaries, meetings, consultations, printing, for one catchment alone (the Richmond River watershed) was approximately $1 M.

The Way Forward: How to Break the Impasse

Various options for designing a code are now possible, including that of continuing attempts to write a code through stakeholders groups like the NRAC or the previous committee, meaning groups consisting of a mix of interested parties, from industry, government agencies and environmentalist organizations. That is in fact what has been approved, so that ''sustainable forestry'' under the NVCA of 1997 will continue until a new approved code takes effect from 30th June 2007. Thus one option is to have more negotiations on the code by various stakeholders committees continuing, though several years and large sums of money have been spent doing just this, with little result. A second possibility involves declaring private native forestry a routine agricultural management activity exempted from the provisions of the NVA of 2003.

The Southern Cross Group (Vanclay et al. 2006) argued that desirable environmental outcomes in private native forests require active management and that incentives rather than punitive legislation would be more effective in encouraging landholders to manage their forests well. The proposed code was a regulatory document, not one which offered financial support to landholders to do a better job of managing their forests. It outlined heavy reporting and planning responsibilities, as well as punishments for infractions, for anyone who wished to continue harvesting native forests. The Southern Cross Group suggested that incentives be paid to those who applied the knowledge of forest management for silviculture found in sources such as Florence, (1996), Baur (2001) and Jay et al. (2005), and for enhancement of biodiversity as suggested by Lindenmayer and Franklin (2003), and Department of Environment and Conservation prescriptions for fauna and flora (DNR 2006b).

Predicting Behaviour and Outcomes: The Challenge of Policy

A theme of 'perverse outcomes' may be detected on both major sides of the debate. On the green side there is a perception that loopholes and a proposed transition period to application of a code will lead to accelerated clearing. This group believes the threat of a restrictive code without the implementation of such a code will encourage landholders to exploit their forests one last time. On the pro-forestry side, as Hoggett (2006) observed in his submission, imposition of the proposed code may well not lead to intensively monitored and managed forests but to abandonment of them. The private native forest owners generally felt, as evidenced in their submissions, that if they were to be penalised for having maintained forests on their properties then they would no longer engage in environmentally beneficial practices, such as low-intensity burning and feral animal and weed control, if they could not continue to earn an income from timber cutting.

Clearly there are two major philosophical points of view clashing in the debate over a code for private native forestry in NSW. There is considerable complexity in implementing high-standard silvicultural and biodiversity enhancement techniques on private forests (Lindenmayer and Franklin 2003; Jay et al. 2005; Thompson and Connell 2006; Thompson et al., 2006). Achieving a code that optimises both

production forestry outcomes and environmental benefits remains a major policy challenge.

Conclusions

A more informed committee may have found it easier to reach agreement on the specific details within a code of practice. It may be helpful to require that all people wishing to serve on such committees should complete short courses in forest ecology, hydrology, wildlife biology and silviculture. This would at least ensure exposure to a basic understanding of forest dynamics that was notably absent in the negotiation process for the proposed code. Another lesson learned from this exercise is that, at some point in time, clear decisions will have to be made on a variety of points of disagreement. If the lead agency in charge of policy insists on having consensus on each point, then a gridlock situation will develop, in which entrenched positions are held and little movement results. Eventually a compromise position needs to be defined by the institution in charge, developing a viable code for private native forestry under the current laws, with the best interests of all parties concerned taken into consideration.

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